

METHOD FOR SYNDICATING ONLINE CONTENTBACKGROUND OF THE INVENTION5 Field of the Invention

The present invention relates to a method and system for managing online content distribution, and more particularly, to a method and system for distributing online content while enforcing 10 exclusivity agreements with other online content providers.

Description of the Related Art

The Internet, which started in the late 1960's, is a vast computer network consisting of many 15 smaller networks that span the entire globe. The Internet has grown exponentially since its inception such that now millions of people per day connect to the Internet using both permanent and dial up connections. The computers, or networks of computers connected to the Internet, known as "hosts", allow public access to files, documents and data covering a vast array of content such as entertainment, information for businesses and consumers and online shopping.

20 The content on the Internet is made available to the public through "servers". A server is a computer system running on an Internet host that makes the server's content, typically stored on magnetic storage devices such as tape drives or fixed disks integral to the host, available to the public. An Internet server distributes the server's contents to a computer requesting the contents 25 though often the contents will not be distributed until the requesting computer provides proof of authorization to receive the information by, for example, providing a password. The requesting computer is known as the "client", which typically is an Internet connected workstation or home personal computer.

30 TCP/IP (Transmission Control Protocol/Internet Protocol) is one networking protocol that permits full use of the Internet. All computers on a TCP/IP network need unique identification codes so that each computer or host on the Internet is identified by a unique number code, known

as the IP address. The World-Wide Web (Web) is a system for accessing information on the Internet that allows a user to navigate the Internet resources intuitively, without knowledge of IP addresses or other technical information. The Web is made up of a multiplicity of Web "pages" that can be displayed on a client's computer monitor when the client's computer is running a 5 Web browser. The Internet servers provide the Web pages from their location on the Web, known as their Web sites.

Business enterprises have found use of the Internet to be quite profitable as it allows business enterprises to reach many customers around the world. Most large companies and many small 10 companies now have Web sites. At first these Web sites were often merely used to advertise a business enterprise's goods and services but now, many business enterprises actually sell their goods and services over the Internet. For example, a consumer may now purchase an automobile, a book, or a vacation over the Internet. An industrial customer may purchase a piece of large equipment or expensive office machines, such as copiers or computers, over the Internet. 15 Some business enterprises have even found it profitable to merely provide a Web site for other businesses to use to sell their goods and services, providing a well advertised Web site for consumers to enter and shop for goods and services from multiple sellers.

The Internet has not, however, provided exclusivity to multiple sellers using a common Web site 20 to offer their goods and services for sale. The concept of exclusivity is well known outside the Internet. For example, a syndicated columnist sells a column appearing daily or weekly only to newspapers or magazines having different geographical areas of distribution. A syndicated columnist selling a syndicated column to one newspaper in New York City will probably not sell 25 the same syndicated column to another newspaper in New York City but instead, may sell the syndicated column to a newspaper in Los Angles. This practice maximizes the syndicated columnist's revenue for selling the syndicated column because the New York City newspaper is willing to pay more for the exclusive right to publish the column in the New York City area than it would be willing to pay without the exclusive geographical right of distribution. The same concept applies to a syndicated television program in the television industry.

Another example of exclusivity of distribution is the broadcasting of sporting events. If a football game is broadcast on television, the game is often blacked out, or not broadcast in the city in which the game is being played, unless all the stadium seats are sold out. This encourages fans wishing to view the game to purchase a seat at the stadium instead of staying home and 5 watching the game on television, thereby maximizing the football team's revenue.

Yet another example of the concept of exclusivity is in the motion picture industry. If a motion picture has been released for viewing to one cable television motion picture provider, or premium channel, it is not simultaneously released to other premium channels. This practice 10 encourages consumers to purchase more than one premium channel, which is of benefit to the motion picture industry, or to purchase only the consumer's perceived best premium channel, which is of benefit to that premium channel.

SUMMARY OF THE INVENTION

15 The present invention allows content distributors on the Internet to offer exclusive distribution of content from multiple content providers while ensuring that the business plans of the content providers are satisfied. The present invention provides a method for distributing online content to purchasers from a variety of content providers based upon the content's distribution parameters. Further, the present invention prevents conflict between the distribution parameters of the different content providers by examining the proposed distribution parameters before the 20 new content is accepted for distribution to ensure there are no conflicts between the existing distribution parameters and the proposed distribution parameters. If conflicts are found, then the new content is not accepted for distribution unless the proposed distribution parameters are altered to remove the conflicts.

25 The content that is distributed may be, for example, films, theatrical performances, sporting events, music performances, magazine subscriptions, newspaper subscriptions, newsletters, entertainment, information, video feeds, audio feeds, television broadcasts, radio broadcasts, 30 news reports, or combinations thereof.

The content is distributed to a purchaser based upon the distribution parameters submitted for each of the different contents offered for distribution. These parameters are based upon considerations that may include, for example, pricing of the content for a purchaser, cost of distribution by the content distributor, time period for distribution of the content, geographical areas to distribute or not to distribute the content, the bandwidth over which the content may be distributed, purchaser properties targeted for distribution or blocked from distribution, content description and classification, exclusivity of distribution from competing content providers, and combinations thereof. Purchaser properties are stored in a purchaser database and may include such items of information as purchaser identification, geographical location, income, age, business classification, demography or combinations thereof.

A purchaser views the content by accessing the content controller server over the Internet and providing information to the content controller server to demonstrate that the purchaser is authorized to view the content. This information includes, for example, purchaser properties, credit card number, payment method or combinations thereof. The purchaser may be issued a password and identification that allows the purchaser to login for future content distribution without having to provide the personal information again.

Content may be distributed to a purchaser only if the purchaser is qualified to receive that content based upon the distribution parameters for the requested content. The distribution parameters may include constraints on distribution that would limit distribution to, for example, purchasers of a certain minimum age or purchasers from a certain geographical region. By comparing the personal information stored in the purchaser database with the constraints contained in the distribution parameters, the content controller server can determine whether the purchaser is qualified to view the requested content.

The present invention also ensures that the content offered for distribution does not conflict with the business policies of the content distributor. The content distributors' business policies may be based upon a variety of parameters, for example, copyright law considerations, objectionable content ban, purchaser demand for types of content, cost of distributing content, distribution hardware availability and combinations thereof. The present invention prevents conflict between

the distribution parameters of the different content providers and the content distributors' business policy parameters by examining the proposed distribution parameters before the new content is accepted for distribution to ensure there are no conflicts between the content distributor's business policy parameters and the proposed distribution parameters. If conflicts 5 are found, then the new content is not accepted for distribution unless the proposed distribution parameters are altered to remove the conflicts.

The present invention also provides a system for controlling the online content distribution to ensure the content does not conflict with the business policy parameters of the content provider 10 or the distribution parameters of the registered content. The system may include a content controller server, storage facilities for the content to be distributed, a distribution parameter database, a content distributor business policy parameter database and a purchaser database. Alternatively, these databases may be combined into one or more separate databases.

15 **BRIEF DESCRIPTION OF THE DRAWINGS**

So that the features and advantages of the present invention can be understood in detail, a more particular description of the invention, briefly summarized above, may be had by reference to the embodiments thereof that are illustrated in the appended drawings. It is to be noted, however, that the appended drawings illustrate only typical embodiments of this invention and are therefore not be considered limiting of its scope, for the invention may admit to other equally effective embodiments.

20 FIG. 1 is a schematic diagram showing the system of the present invention.

25 FIG. 2 is a schematic diagram illustrating an example of a content controller server system connected through a network.

30 FIG. 3 is an example of a computer system in which the present invention may be implemented.

FIG. 4 is a flow chart of a method for determining whether new content conflicts with the exclusivity policies of existing content providers.

FIG. 5 is a flow chart of a method for distributing content to an online purchaser.

5

DETAILED DESCRIPTION

The present invention provides a method for making syndicated content available on-line from a variety of syndicated content providers while enforcing the exclusivity requirements of each of the syndicated content providers. Traditionally, syndicated content is sold or published by many different publishers simultaneously with exclusivity constraints attached. For example, a newspaper in New York City may publish a syndicated column but that same column would not be available to be published by another newspaper in New York City because the first paper purchased the exclusive rights to publish the syndicated column in the New York City area. However, a newspaper in Los Angeles could publish the same syndicated column simultaneously with the publication in New York because the publication in Los Angeles would not conflict with the exclusivity requirements of the New York City publication.

In the more modern sense, syndicated content is made available on-line by a content distributor that makes the content available to purchasers only if pre-set exclusivity constraints for distribution are met. These constraints may include, for example, geographical location and time period just as in the traditional sense. If the syndicated content is a live baseball game, the content provider may allow a content distributor to distribute the game to purchasers but only if no other sporting event is being distributed by the content distributor at the same time as the game and only if purchasers from the game's location are not allowed to view the content. The content distributor, therefore, must enforce the exclusivity constraints of the content provider by ensuring there are no other sporting events scheduled for distribution at the same time as the game and to ensure purchasers located in the game's location are not permitted to view the content.

30

The present invention prevents conflict between the exclusivity requirements, expressed as distribution parameters, of the different content providers by examining the proposed distribution parameters before the content is accepted for distribution. New content is rejected if its distribution parameters are in conflict with the existing content. A potential content provider 5 may be given the opportunity to change its distribution parameters and thereby remove any conflicts with the distribution parameters of the existing content. If changed successfully, then the new material could be accepted by the content distributor and made available for purchasers to view.

10 FIG. 1 is a schematic diagram showing the online content control system 10 of the present invention. An online purchaser 14 accesses a content distributor through a communications system or network 22, such as the Internet, to receive the online registered content 12 provided by content providers for distribution by the content distributor. A content distributor is a business enterprise that provides a Web site for distributing content to purchasers. A content distributor may distribute content provided by the content distributor, provided by another content provider, provided by multiple content providers or combinations thereof. A content controller server 11 communicates with multiple purchasers 14 through the communications network 22 and downloads or displays the registered content 12 to the online purchasers 14 when it does not violate the distribution parameters 13 specified by the content providers or the content distributor's business policy parameters 18. A registered purchaser database 16 contains records for each online purchaser including the online purchaser's identification, password used to access the content, credit card number, method of payment for receiving the content, other purchaser properties, and combinations thereof. Other purchaser properties may be, for example, geographical location, income, age, business classification, demography or combinations thereof. 15
20
25
30

A purchaser's geographical location detector 17 may also reside on the content controller server 11 to identify the geographical location of a purchaser 14 from the purchaser's IP address. Under IPv4 (Internet Protocol, version 4), the content controller server can identify a purchaser's geographical location by using a reverse lookup on an address using a Domain Name Service (DNS). A DNS translates domain names into IP addresses. Under IPv6, which is currently under development, every purchaser will have a location attribute in the purchaser's IP address,

which will simplify identifying the purchaser's geographical address by the content controller server 11.

5 A potential content provider 19 may also access the content controller server 11 to request distribution of new content 21. In this case, the potential content provider 19 submits proposed distribution parameters 20 for comparison with the existing distribution parameters 13 and the content distributor's business policy parameters by the policy conflict detector 15.

10 The registered contents 12, distribution parameters 13, the purchaser database 16, the purchaser's geographical location detector 17, the content distributor's business policy parameters 18 and the policy conflict detector 15 will preferably all reside on the content controller server 11.

15 The registered contents 12 to be distributed may be any type of content provided by a content provider for distribution by the content controller server 11. The content may include, for example, films, theatrical performances, sporting events, music performances, magazine subscriptions, newspaper subscriptions, newsletters, entertainment, information, video feeds, audio feeds, television broadcasts, radio broadcasts, news reports, or combinations thereof.

20 A potential content provider 19 specifies proposed distribution parameters 20 for the new contents 21. The potential content provider may connect to the content controller server 11 over the Internet 22 and specify the proposed distribution parameters 20 by using a graphical user interface (GUI). The GUI is preferably similar to a form that can be filled out using checklists, pull down menus and other standard features that enable the potential content provider to clearly specify the proposed distribution parameters 20 of the new content 21. The potential distribution parameters 20 may include, for example, pricing of the content for a purchaser 14, cost of distribution by the content distributor, time period for distribution of the content, geographical areas to distribute or not to distribute the content, the bandwidth over which the content may be distributed, purchaser properties targeted for distribution or blocked from distribution, content description and classification, exclusivity of distribution from competing content providers, and 25 combinations thereof. The purchaser properties may include, for example, purchaser's age, income, geographical location, other demographic information, and combinations thereof.

30

Alternatively, the potential content provider may specify proposed distribution parameters **20** by negotiation with the content distributor, by written proposal, or by combinations thereof and then submit the proposed distribution parameters to the content controller server **11** in computer readable format.

5

The distribution parameter conflict detector **15** compares the proposed distribution parameters **20** with distribution parameters **13** of the registered content to ensure that no exclusivity or other requirement or constraint of the registered content distribution parameters would be violated if the new content were distributed. For example, if a live baseball game were being distributed, a 10 proposal to distribute a soccer game at the same time may be a conflict if a distribution parameter for the baseball game stated that no other sporting events could be distributed during the time period of the baseball game. Another example might be that if a live theatrical performance were being distributed, a proposal to distribute a different live performance at the same time could be a conflict. An additional example of a conflict might be that sufficient distribution hardware is not available to distribute additional content when considering the design capacity of the content controller system **10** for downloading or displaying the content to purchasers. If the policy conflict detector **15** determines there is an exclusivity conflict, hardware availability conflict, or other conflict, then the new content would not be accepted for distribution without changes to the proposed distribution parameters to resolve the conflict.

15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

20 The distribution parameter conflict detector **15** also compares the proposed distribution parameters **20** with the content distributor's business policy parameters **18** to ensure that the proposed content **21** and the proposed distribution parameters **20** complies with the content distributor's business policy parameters **18**. The content distributor's business policy parameters 25 may include, for example, copyright law considerations, objectionable content ban, purchaser demand for types of content, cost of distributing content, distribution hardware availability, and combinations thereof. For example, the content distributor may have a business policy parameter not to distribute political commentary and would therefore reject any request to distribute political commentary. Or the content distributor may know that a potential content 30 provider has expressed intent to have content distributed that would be very profitable for the content distributor. In that situation, the content distributor may want to keep distribution

hardware capacity available for the more profitable business opportunity and therefore reject a request that would reduce the available hardware capacity.

The communications network **22** is the medium used to provide communications links between 5 various devices and computers connected together within the online content controller system **10**. The communications network **22** may include permanent connections, such as wire or fiber optic cables, or temporary connections made through telephone or wireless communications. Online purchasers **14** and servers **11** may be represented by a variety of computing devices, such 10 as mainframes, personal computers, personal digital assistants (PDAs), smart phones, etc. The online content controller system may include additional servers, clients, routers and other devices not shown. In the depicted example, the online content controller system **10** may include the Internet **22** with the online content controller system **10** representing a worldwide collection of networks and gateways that use the TCP/IP suite of protocols to communicate with one another. Of course, the online content controller system **10** may also include a number of different types 15 of networks, such as, for example, an intranet, a local area network (LAN), or a wide area network (WAN).

The present invention may be implemented on a variety of hardware platforms and may be implemented in a variety of software environments. A typical operating system may be used to control program execution within the data processing system. Furthermore, although the preferred embodiment described below includes a "browser" at the purchaser **14** and potential content provider **19** as the agent exchanging data in the security protocols with the Web Application Server, the agent does not have to be a conventional browser, e.g., Netscape Navigator® or Microsoft Internet Explorer®. In order to secure the information transmitted to 20 and from the server, the purchaser or potential content provider may be capable of Public Key Infrastructure (PKI) technology exchanged in a security protocol such as the Secure Sockets Layer (SSL) version 3.0 and above.

The content controller server **11** includes a conventional server software program, such as 25 International Business Machines' Websphere®, for administering the content. The server software includes application programs that enable the content controller server **11** to manage the

databases and execute policy conflict detection **15** or instructions based upon the distribution policies **13** in response to purchaser **14** access requests from the various online purchasers **14**.

FIG. **1** further illustrates an online purchaser **14** or potential content provider **19** communicating with a content controller server **11** to access and view the registered contents **12**. As illustrated, the online purchaser or potential content provider at a workstation **14, 19** seeks access over a computer network **22** to the online content **12** or other functions on the content controller server **11** located on a content controller server **11** through the workstation's web browser **14A, 19A**. The computer network **22** may be the Internet, an intranet, or other network. The content controller server **11** may be a Web Application Server (WAS), a server application, a servlet process or the like. Optionally, the workstation **14, 19** submits the required information to identify the online purchaser or potential content provider as being authorized to access the online content **12**. The information may include data such as a password or a combination of an online purchaser or potential content provider identification and password assigned by the content controller server **11**. The content controller server **11** generates a graphical user interface that is displayed by the browser **14A, 19A** providing the individual options to the online purchaser or potential content provider.

FIG. **2** depicts an example of an online content controller server system connected through the Internet **21**. In this example, a content controller server system **22** is connected through the Internet **21** to an online purchaser's system **20**. The online purchaser's system **20** includes conventional components such as a processor **24**, memory **25** (e.g. RAM), a bus **26**, a mass storage device **27** (e.g. a magnetic hard disk or an optical storage disk) coupled to the bus **26** through an I/O controller **28** and a network interface **29**, such as a conventional modem. The content controller server system **22** also includes conventional components such as a processor **34**, memory **35** (e.g. RAM), a bus **36**, a mass storage device **37** (e.g. a magnetic or optical disk) coupled to the bus **36** through an I/O controller **38** and a network interface **39**, such as a conventional modem. It will be appreciated from the description below that the present invention may be implemented in software that is stored as executable instructions on a computer readable medium on the online purchaser's system, the potential content provider's system and the content controller server's system, such as mass storage devices **27** and **37** respectively, or in

memories 25 and 35 respectively. The content controller server system 22 is shown having registered content 97, distribution parameters 99, policy parameter conflict detector 95, business policy parameters 98, purchaser geography detector 96 and purchaser database 94. The content controller server 22 is thus suitable for processing: (1) purchaser identification, (2) purchaser geographical location, (3) parameter conflict detection, (4) distribution parameter enforcement, and (5) registering potential content providers and purchasers.

FIG. 3 shows an online purchaser's computer system 100 capable of running a browser. A similar system may be used for a potential content provider. The computer system 100 includes a display device 102 (such as a monitor), a display screen 104, a cabinet 106 (which encloses components typically found in a computer, such as CPU, RAM, ROM, video card, hard drive, sound card, serial ports, etc.), a keyboard 108, a mouse 110 and a modem 112. The mouse 110 may have one or more buttons, such as buttons 116. The computer requires some type of communication device such as modem 112 that allows computer system 100 to be connected to the Internet. Other possible communication devices include ethernet network cards.

20 FIG. 4 is a flow chart of a method that may be executed on the system of FIG. 1. The method includes determining whether new content provided by a potential content provider conflicts with the exclusivity parameters of existing content providers. In state 100, a potential content provider 19 requests distribution of new content 21 from the content controller server 11. In state 105, using a graphical user interface (GUI), the potential content provider 19 specifies proposed distribution parameters 20 required to distribute the new content 21 of the potential content provider. In state 110, the content controller server 11 checks for exclusivity conflicts with the existing content providers' distribution parameters 13 using the parameter conflict detector 15. In state 115, if there are exclusivity conflicts, then in state 120, the content controller server notifies the potential content provider of the conflicts. In state 125, the potential content provider changes the proposed distribution parameters to comply with the exclusivity requirements of the existing distribution parameters. If, in state 130, the exclusivity conflicts are not resolved, then in state 135, the content controller server rejects the potential content provider and the new content is not distributed.

25

30

If, in state **115**, there are no exclusivity conflicts with the existing distribution parameters **13**, or in state **130**, agreement is reached, then in state **140**, the content controller server **11** checks for conflicts with the content distributor's business policy parameters **18**. If, in state **145**, there are no conflicts with the content distributor's business policy parameters, then in state **150**, the potential content provider is registered with the distribution parameters for the new content and in state **155**, the registered content is provided for distribution to purchasers. If, in state **145**, there are conflicts with the content distributor's business policy parameters **18**, then in state **160**, the content controller server **11** notifies the potential content provider **19** of the conflicts. In state **165**, the potential content provider changes the proposed distribution parameters **20** to comply with the content distributor's business policy parameters requirements. If, in state **170**, the conflicts are not resolved, then in state **175**, the content controller server rejects the potential content provider and the new content is not distributed. If, in state **170**, the conflicts are resolved, then the method follows the steps shown in states **150** through **155** as shown above.

15 FIG. 5 is a flow chart of a method that may be executed on the system of FIG. 1 for distributing
registered content to an online purchaser. In state 200, the purchaser 14 connects to the content
controller server 11 to request the registered content 12 to be downloaded or otherwise presented
for viewing. If, in state 205, the purchaser is a registered purchaser, then in state 225, the content
controller server 11 checks to determine whether the purchaser properties meet the requirements
20 of the distribution parameters 13 for the registered content 12 requested to presented. If, in state
230, the purchaser properties are consistent with those required by the distribution parameters,
then in state 240, the registered content is displayed to the purchaser. If, in state 230, the
purchaser properties are not qualified, then in state 235, the content controller refuses to
download the requested registered content.

25 If, in state **205**, the purchaser is a new customer, then in state **210**, the new purchaser is requested
to complete a questionnaire on line providing all the necessary demographic information and
identification for the purchaser. In state **215**, the demographic information is stored in the
purchaser database **16** and, in state **220**, the purchaser is provided with a password. The method
30 then continues in steps **225** through **240** as discussed above. Alternatively, a purchaser may be
granted access to the registered material without being a registered purchaser as long as the

distribution parameters concerning providing registered material to purchasers are satisfied. For example, if a content provider is only interested in providing content to purchasers in a given geographical area, has no other distribution parameters for consideration, and the content controller server determines from the IP address of the purchaser that the purchaser is from the 5 given geographical area, then the content controller can allow the purchaser access without requesting any additional information if access is free and payment information for the content distributor is not required.

While the foregoing is directed to the preferred embodiment of the present invention, other and 10 further embodiments of the invention may be devised without departing from the basic scope thereof, and the scope thereof is determined by the claims that follow.